

RIVER WEAR CATCHMENT MANAGEMENT PLAN ACTION PLAN



NRA

*National Rivers Authority
Northumbria & Yorkshire Region
March 1995*



Water Quantity

Key flow statistics at Wear gauging stations.

(all units in cumecs. 1 cumec = one cubic metre per second)

Gauging Station	River	Dry Weather Flow (Q95)	Mean	
			Flow	Annual Flood
Stanhope	Wear	0.50	3.66	121.9
Witton Park	Wear	1.24	7.78	196.1
Burn Hall	Brownie	0.30	1.70	37.6
Sunderland Bridge	Wear	2.00	11.12	221.3
Chester-le-Street	Wear	3.01	14.55	-

Flood Defence

Length of Designated Main River	189 km
Length of Flood Defence on Main River	Tidal 0 km
	Fluvial 32 km

Fisheries

Length of watercourse designated under the EC Directive Freshwater Fisheries (78/659EEC)

Salmonid	148.8 km
Cyprinid	stillwaters only

Conservation

Sites of Special Scientific Interest (SSSI)	2.2% of catchment area
Scheduled Ancient Monuments (SAM)	65

Landscape

Environmentally Sensitive Area (ESAs)	Pennine Dales (3% of catchment area)
Areas of Outstanding Natural Beauty (AONBs)	North Pennines (26% of catchment area)

Abstraction Licences and Discharge Consents

Total Volume of Licensed Surface Water Abstractions: 60792.2 TCMA

Total Volume of Licensed Groundwater Abstractions: 25703.8 TCMA

Sewage Treatment Works: NWL total	83
Serving in excess of 250 population equivalent	50
non NWL	60
Total	143

(1) 1 sq km (square kilometre) is equivalent to 0.36 square miles. 1 ha (hectare) is equivalent to 2.47 acres.

(2) The General Quality Assessment classes are determined based on the concentrations of dissolved oxygen, biological oxygen demand and ammonia in the water. Class A and B are 'good'; Class C and D 'fair'; Class E is 'poor'; Class F is 'bad'.

The National Water Council (NWC) scheme has been replaced by a new scheme called the General Water Quality Assessment (GQA). This consists of a number of separate water quality assessments, each providing a separate 'window' through which water quality can be viewed. The first of these windows to be developed is the chemical 'window'. It is intended that further 'windows' be added, covering biology, nutrients and aesthetic quality, but this will depend on the successful development of suitable methods and classification systems.

(3) 'Main River' is a legal definition which gives certain discretionary powers to the NRA.

(4) Q95 The flow which is exceeded 95% of the time. A measure of low flow in a river.

(5) Mean Flow The long term of the average daily flow.

(6) Mean Annual Flood A long term average of the highest daily flow per year.

KEY CATCHMENT FACTS - RIVER WEAR

Area	1174 Km ²
Estimated Population	420,000
Geology	
Upper Wear	Coal Measures, Millstone Grit, Upper & Lower Limestone
Gaunless	Coal Measures
Middle Wear	Coal Measures, Magnesian Limestone
Brownley	Coal Measures
Coastal Streams	Coal Measures, Magnesian Limestone

Topography

Ground Levels	Min level	00.0 mOD
	Max level	749.0 mOD

Administrative Details

(figures are percentage of Wear catchment area within Council boundaries)

County Councils:

Durham	89
Cleveland	<1

District Councils:

Wear Valley	34	Durham City	14.5
Derwentside	12	Teesdale	12
Easington	10	Chester-Le-Street	4
Sedgefield	3	Harlepool	>1
Darlington	>1		

Unitary Authorities:

Sunderland	9.5
South Tyneside	0.5

NRA:

Northumbria and Yorkshire Region (Northumbria Area)

Water Companies:

Northumbrian Water Limited
North East Water plc

Main Centres of Population

(estimated from 1991 census)

Sunderland	190,000	Washington	62,000
Houghton Le Spring	38,000	Durham City	30,000
Chester-Le-Street	19,800	Bishop Auckland	18,000
Crook	12,500	Willington	6,500
Brandon	6,050	Lanchester	5,000
Ushaw Moor	4,350	Framwellgate Moor	4,000
Fence Houses	3,500	Langley Park	3,500
West Auckland	2,850	Shiney Row	2,500
St. Helen Auckland	2,500	Wolsingham	2,000
Stanhope	1,500		

River Wear Catchment

KEY

— · — · —	CATCHMENT BOUDARY
—	RIVER
⊙	TIDAL LIMIT
—	ROAD NETWORK
- - - - -	RAILWAY

**Water Quality**

Lengths of watercourse (km)
categorised by General Quality
Assessment (GQA) classes:
(1990 -1993)

Class A	12.8
Class B	109.6
Class C	123.7
Class D	19.4
Class E	16.8
Class F	11.2

Lengths of Estuary in
National Water Council Classes
(1990 data)

Class A	9.0
Class B	7.0
Class C	0.0
Class D	0.0

FOREWORD

The River Wear has always played a centre role in the history of the communities which have settled and grown up on its banks, but it has also been a resource which has been both used and abused, often with little thought to its future. During the industrial revolution the river suffered from the discharge of wastes from the mining, steel and shipbuilding industries and also from the discharge of sewage from a rapidly increasing population.

Over the last twenty years dramatic improvements in water quality have been achieved. The Wear now once again supports a significant migratory salmonid fishery and is of strategic importance to the domestic and industrial water supply of the North East. The Wear and its catchment provide a haven for wildlife and recreational opportunities for the region's 2 million people.

We cannot foresee clearly all the changes likely to occur over the next 20 years. However, in this plan we not only identify actions to protect and improve the water environment over the next 5 years, but also establish a catchment vision to guide policy and action for at least the next 10 years.

We recognise that the vision will only be achieved if we work with and influence others who share our interest in the future health of the River Wear. I hope you can help us to take this initiative forward.



Richard Cresswell
Area Manager, Northumbria Area
Northumbria and Yorkshire Region
National Rivers Authority

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VISION FOR THE RIVER WEAR CATCHMENT

The NRA, together with all interested parties, see the River Wear, its tributaries and the Durham coastal streams continuing to be a valuable resource to the people of the North East. Its waters must be maintained and improved to be of a quality suitable for the uses to which they will be put. The river's flows and the physical structure of its stream network and associated habitats must be protected so that their diversity is sustained. Controlled access for recreational uses may be developed but, as with all other uses of the water environment, must be balanced with the needs of the river's natural ecology.

Key indicators of the health of the River Wear catchment will be:

- the diversity and abundance of invertebrates and fish in the river system
- the length of rivers regularly used by otters

The River Wear catchment will be protected and enhanced in a way that allows the sustainable use of the water environment and ensures that future generations will enjoy the river and its wildlife.

The River Wear, its tributaries and the Durham coastal streams are highly valued by the communities which live within the catchment. The catchment is home to over 400,000 people who are dependent on the water environment for both industrial and domestic water supplies and the disposal of sewage and industrial effluents. Protection of land and property against flooding is important. The River Wear is widely used for amenity and recreation and also supports a wide diversity of ecological habitats, including an important fishery. There is concern that the cessation of pumping and flooding of coal workings of the Durham coalfield will result in polluting discharges to the River Wear and its tributaries. There could be serious effects on the amenity value, the ecology of the river, the fishery, and water abstraction, including the public water supply abstraction at Lumley.

Key aims and objectives in working towards this vision are:

- To ensure that all new developments within the Wear catchment area meet the needs of the present without compromising current and future uses of the water environment. This will be achieved in part by working with Local Authorities to ensure all adopted development plans include policies to protect and enhance the water environment.
- To protect and improve water quality to achieve standards which will sustain the current and future uses of the River Wear and its tributaries, including fish populations.
- To develop and apply a river regulation policy for the River Wear which balances the needs of river and reservoir users and the ecology of the river.
- To identify river, stream or wetland sites on 'main river' where quantity of water is a critical factor in sustaining the ecological

diversity of that habitat and to complete water level management plans for those sites by 1998.

- To provide adequate arrangements for flood forecasting, warning and response to flood events.
- Where justified, to provide effective defences for people and property against flooding from rivers and sea whilst ensuring that any flood defence works further conservation and enhance the rivers natural ecology.
- To maintain and enhance the diversity of natural river features, river corridor habitats and their associated flora and fauna and to identify, prepare, agree and implement enhancements for key sites.
- To support the preparation of a management plan for the River Wear estuary.
- To ensure, where appropriate, that artificial barriers whilst maintaining their flood defence, landscape and recreational importance, do not impede the natural migration of fish.
- To encourage improved access to the river for recreational use by implementing the 'Making Waves' strategy and identifying, preparing, agree and implement improvements for access.

The realisation of this vision for the future of the River Wear catchment will need a co-operative approach involving all interested parties. It is our intention to work in partnership with all relevant agencies, organisations and individuals to develop, promote and achieve this vision through an integrated approach to managing the catchment. Clear communications are essential to this approach and it is our intention to discuss the formation of a 'River Wear User Forum' to assist in the monitoring and developing of the Plan.

1.0 INTRODUCTION

The Concept of Catchment Management Planning

The rivers, lakes, estuaries and coastal waters of England and Wales have never before been subject to such large and rapidly increasing demands from the users of water. Many different uses interact or compete for water and will inevitably come into conflict with one another. The National Rivers Authority has the major responsibility for managing the water environment in England and Wales and for reconciling conflicts between water users. Our Mission Statement expresses the following principles:

“We will protect and improve the water environment by the effective management of water resources and by substantial reductions in pollution. We will aim to provide effective defence for people and property against flooding from rivers and sea. In discharging our duties we will operate openly and balance the interests of all who benefit from and use rivers, groundwater, estuaries and coastal waters. We will be business-like, efficient and caring towards our employees.”

We have chosen to use Catchment Management Plans to translate those principles into action. The plans describe our vision for each catchment, identify problems and issues and propose actions that may be taken to resolve them. The plans also provide the means of promoting two key aspects of environmental management: land use planning and water quality objectives.

Catchment Management Plans comprise a “Consultation Report” and an “Action Plan” which together:-

- assess catchment resources, uses and activities
- are used to consult widely on issues to be tackled
- establish a long-term vision for individual catchments
- use effective and proactive planning to prevent future environmental damage and to provide lasting solutions to environmental problems.

This Action Plan for the River Wear catchment incorporates views arising from public consultation and represents a working document for the achievement of improvements to the river environment. It is based on a wide range of views gathered from planning authorities,

Government departments, landowners, farmers, conservation organisations, developers, industry and recreational groups. We are committed to monitoring its implementation and will continue to revise and update both the policy and action elements of the plan through on-going liaison and consultation.

The National Rivers Authority

The NRA was created in 1989 as an independent environmental watch-dog. Our prime purpose is to protect and improve the water environment in England and Wales and regulate the use of water by industry, agriculture and the private water and sewerage companies.

We look after both inland and coastal waters including rivers, lakes and canals as well as groundwaters. We have statutory responsibilities for water quality, water resources, flood defence, fisheries, conservation, navigation and recreation. We also protect people and property from flooding caused by rivers and the sea.

Our core activities cover environmental regulatory and operational work. We have an important role in environmental emergencies and in influencing land use through the Town and Country Planning process. We are a Non-Departmental Public Body sponsored by the Department of the Environment (DOE). The Ministry of Agriculture, Fisheries and Food (MAFF) also has important policy responsibilities in relation to flood defence and fisheries.

When enacted, the Environment Bill will create a new environment agency which will incorporate the National Rivers Authority, Her Majesty's Inspectorate of Pollution (HMIP) and the Waste Regulation Authorities. The Bill is currently before Parliament.



2.0 DEVELOPING THE CATCHMENT PLAN

The Consultation Report

The NRA, through internal discussion and informal liaison with a range of outside bodies, produced the River Wear Catchment Management Plan - Consultation Report. This Report described the catchment, the uses of the catchment and activities within it, reviewed the state of the catchment against targets and identified issues which need to be addressed. Proposals for actions to address these issues were made.

Public Consultation

The NRA considers public consultation and open discussion to be an essential feature of Catchment Management Planning. To encourage participation in this we:

- formally launched the Consultation Report on 5th October 1994 at Trevelyan College, University of Durham
- distributed over 600 copies of the Consultation Report to over 385 organisations, groups and individuals
- held two public open meetings on 6th December 1994 at Bishop Auckland College and on 7th December at the Crowtree Leisure Centre, Sunderland
- advertised the plan and the meetings in newspapers
- placed display boards in local libraries
- conducted press interviews for newspapers and radio
- attended meetings with interested parties to discuss the plan.

Summary of Comments

Written responses were received from 79 interested organisations, groups and individuals. The main points indicated were:

- considerable concern from consultees regarding the cessation of minewater pumping. Strong support was expressed for the NRA's and other organisations work on this issue (particularly Durham County Council's and the district councils'). However, concern was expressed regarding the legal ambiguity for discharges from abandoned mines, that the present agreements have yet to be tested legally and that there was reliance on the voluntary code of practice to deal with this issue.

- there are severe cost implications associated with any pollution of river as a result of a cessation of minewater pumping. Several consultees, in particular North East Water plc, wished the Action Plan to take account of this cost. North East Water have identified three options for alternative sources of water in the event of minewater pollution, as follows:

- locate the abstraction point on the River Wear upstream of the likely discharge locations for minewater and construct a new pipeline to Lumley Treatment Works
- increase abstraction from Derwent Reservoir supported by transfers from the River Tyne, provide additional treatment capacity at Mosswood and construct a new pipeline to Sunderland
- increase abstraction from the Tyne at Ovingham, provide additional treatment capacity at Horsley and construct a pipeline to deliver in to Sunderland

NEW indicated that each of these options would cost in the region of £24 million. There would be many other costs associated with any such pollution related to fisheries, recreation, tourism and possible flooding of land and property.

- support for the concept of integrated catchment planning



- confirmation of the range and extent of catchment resources, uses and activities and the major issues
- a number of factual error, however, these did not significantly affect the majority of the issues
- the local authorities need for more precise local level information from the NRA to allow them to protect the water environment through their development plans, particularly in relation to groundwater protection and flooding
- support for all measures to protect and improve water quality throughout the catchment
- concern regarding the need to develop a 'natural' river regulation policy
- support regarding the importance of a review of the significant physical structures, weirs and dams of the River Wear
- concern regarding the importance of the estuary and the need to develop a detailed management plan for the area particularly with regard to the potential conflict between increasing recreational use and the nature conservation value of the area
- concern that the Himalayan balsam and giant hogweed are more widespread within the Wear catchment than was described in the Consultation Report
- strong support for measures to enhance habitats along the river edges, particularly in relation to the protection of water quality
- details of consultees use and enjoyment of the River Wear and concern for its future
- that any improved access to the river for recreational use must be undertaken sensitively by encouraging constructive dialogue between all parties

We have considered the detailed responses made and developed the vision, objectives and activity plans in a way which we believe reflects a reasonable balance between the opinions expressed and the desire to ensure the plan is achievable.

3.0 OVERVIEW OF THE CATCHMENT

Catchment Description

The River Wear rises at about 650m AOD on the Pennines as Killhope Burn. It flows eastwards past several small towns, including Stanhope and Wolsingham, towards Bishop Auckland where it begins to turn northwards. Towards Durham the river begins to meander past Durham and Chester-le-Street to Lamb Bridge, the tidal limit. From here it flows north east through Sunderland and Wearmouth into the North Sea.

The major tributaries include Rookhope Burn, Bollilhope Burn and Waskerley Beck draining the moors; Bedburn Beck draining through Hamsterley Forest; the rivers Gaunless, Browney and Deerness, in the middle reaches, draining more urban, lowland centres.

The catchment is crossed by three major north south transport links, the A1(M), the A19(T) and the east coast railway line. There are several centres of population within the lower and middle reaches of the catchment. These include Sunderland, Washington, Chester-le-Street, Durham and Bishop Auckland. In the upper valley, small towns include Wolsingham, Stanhope, Eastgate and Westgate.

The streams draining the coastal strip include Dalton Burn, which enters the North Sea at Seaham, Castle Eden Burn, which flows past Peterlee, and Crimdon Beck. These streams, flowing eastwards across the Magnesian Limestone escarpment of the coastal area, have cut steep sided valleys or denes.



Review of Resources, Uses and Activities

These are described in full in the Consultation Report. The following are extracts of key information:

- The average catchment rainfall is approximately 820mm which ranges from 1800mm around Burnhope Seat in the upper Wear to about 630mm near the coast. The lowlands receive most of their rainfall on easterly or northeasterly airstreams approaching from the North Sea.
- There are 68 licensed surface water abstractions in the Wear catchment, authorising abstraction of 60,793 thousand cubic metres per annum (TCMA). Public water supply licences account for over 87% of the authorised abstraction, agriculture 7% and industry 6%. The flows in the River Wear can be supported from the River Tyne via The Kielder Scheme.
- The major aquifer in the region is the Magnesian Limestone which outcrops in the Sunderland area in the east of the catchment. It is extensively used for public water supply. There are 27 licensed groundwater abstractions licensed in the Wear catchment
- There are approximately 142 Sewage Treatment Works (STW). Northumbrian Water Ltd (NWL) operate 82 of these works, of which 50 serve populations in excess of 250. The remaining STWs serve small private developments and are operated by the owners. A number of STWs are causing a deleterious impact on the receiving watercourses.
- Since the licencing provisions of Control of Pollution Act (COPA) were brought into force, in 1976, 169 waste disposal licences have been issued within the Wear catchment. There are 122 landfill sites, 32 transfer stations, 6 scrapyards, 3 incinerators and 2 recycling centres. Some waste disposal sites and contaminated land sites are causing deleterious impacts on the receiving watercourses.
- Mining and quarrying have been an integral part of the working environment of the River Wear catchment. The main minerals currently being worked are coal, sand and gravel, sandstone, limestone, dolomite, igneous rock, brickclay and vein minerals such as fluorspar and barytes. Lead mining has ceased and coal working is

restricted to opencast operations. There has been no requirement for ganister (a type of sandstone) quarrying since the decline and eventual closure of the Consett steelworks. Deep mining for coal in the Wear catchment has ceased. Prior to the closure of coastal collieries, British Coal (BC) operated a number of inland pumping stations (former collieries) to intercept and prevent minewater flowing through the workings towards to the coast. This reduced the necessity for expensive pumping from the deep coastal collieries. Now the coastal collieries have closed it is no longer necessary to pump to protect the underground workings. In other parts of the country, the cessation of pumping and flooding of coal mines has resulted in contaminated discharges to the surface. In particular, rusty deposits of iron hydroxide in the receiving waters has caused severe environmental damage which is both difficult and expensive to remedy. The threat of pollution from this source is the major issue in the River Wear catchment.



CURRENT MINEWATER PUMPING

- The main River Wear has a long history of flooding. Floodbanks at Bishop Auckland, Croxdale and Shincliffe are at risk from overtopping during a severe event. Property and agricultural land may be inundated at Page Bank, Sunderland and Durham. Although redevelopment work at Durham has reduced the number of properties at risk, some areas including Framwellgate waterside remain vulnerable. Property at Fatfield is at risk from tidal/fluviat flooding.

- The majority of urban and industrial areas are located in the lower Wear valley including Sunderland, Washington, Houghton-le-Spring, Durham City, Chester-le-Street and Bishop Auckland. Urban developments in the catchment area have been influenced by past industrial activities, the most important being mining, ship building and shipping. Agriculture is the predominant land use in upper catchment, although in the past the area was important as a metal mining centre. This has left a legacy of potential pollution in the form of contaminated land and spoil heaps. Future urbanisation of previously undeveloped land areas or redevelopment of land has implications for water supply, effluent disposal, solid waste disposal, flood defence, landscape and ecology. Local Authorities are therefore key players in protecting and enhancing the water environment through their Development Plans. [photo of development or diagram]
- Within the Wear catchment, three broad areas of rural land use exist. The upper Weardale area is mainly exposed moorland used as grouse moor and for rough grazing. The middle/upper area in the Wear catchment supports mainly sheep hill farming, with some beef cattle. In the plains and lower Wear valley the farming practices are mainly arable, with some sheep and dairy cattle.
- The Wear catchment area contains a diverse range of features of high conservation value. There are 53 Sites of Special Scientific Interest (SSSI), 20 of which are associated with the aquatic environment. These SSSI's have been identified using a range of criteria. The principal habitats protected are fen/carr, woodland, heath and bog, along with a number of geological sites.
- The River Wear supports important stocks of coarse fish, migratory and non-migratory salmonids and eels. Salmon and sea trout are abundant in the upper and middle reaches of the river and tributaries. Some tributaries in the lower catchment support only limited fish populations reflecting poor water quality conditions. The estuary supports a relatively low diversity of fish species. This is dominated by the estuarine resident flounder.
- The relatively large urban centres in the mid and lower reaches of the River Wear mean that there is a considerable demand for recreation in the catchment. This activity is often focussed on the river as a key feature in the landscape with relatively easy access. In the urban reaches of the estuary and coastal areas there is an increasing demand for active watersports such as sailing, windsurfing, sub-aqua diving, rowing, motor boating, water-skiing and the use of personal water craft.
- Angling for salmon and sea trout takes place over most of the main River Wear from Fatfield up to Wearhead. The Wear is predominantly a sea trout river and as such is not noted for its spring run of salmon. Coarse angling is well established in the lower reaches of the main river with some clubs devoting 90% of their efforts to coarse fish. The area around Durham and Chester-le-Street is particularly good for dace, chub and roach.
- The main landscape designation in the Wear Catchment is the North Pennines AONB. Most of the catchment upstream from Wolsingham is included in the AONB. The catchment is fortunate in having a rich heritage of old buildings and monuments which gives it a distinctive local character. Parts of the City of Durham have been designated a World Heritage site. Over 50 SAM's are found in the catchment, with the majority found in the middle and lower reaches of the catchment. These are of diverse types though medieval and ecclesiastical sites, bridges and fortifications/castles/manor houses are the most common monuments in the catchment. Of particular note are the 9 SAM's which are bridges, ranging from Stanhope to Chester-le-Street. There are a further 5 SAM's identified within the coastal streams area south of the Wear.

Water Quality Objectives

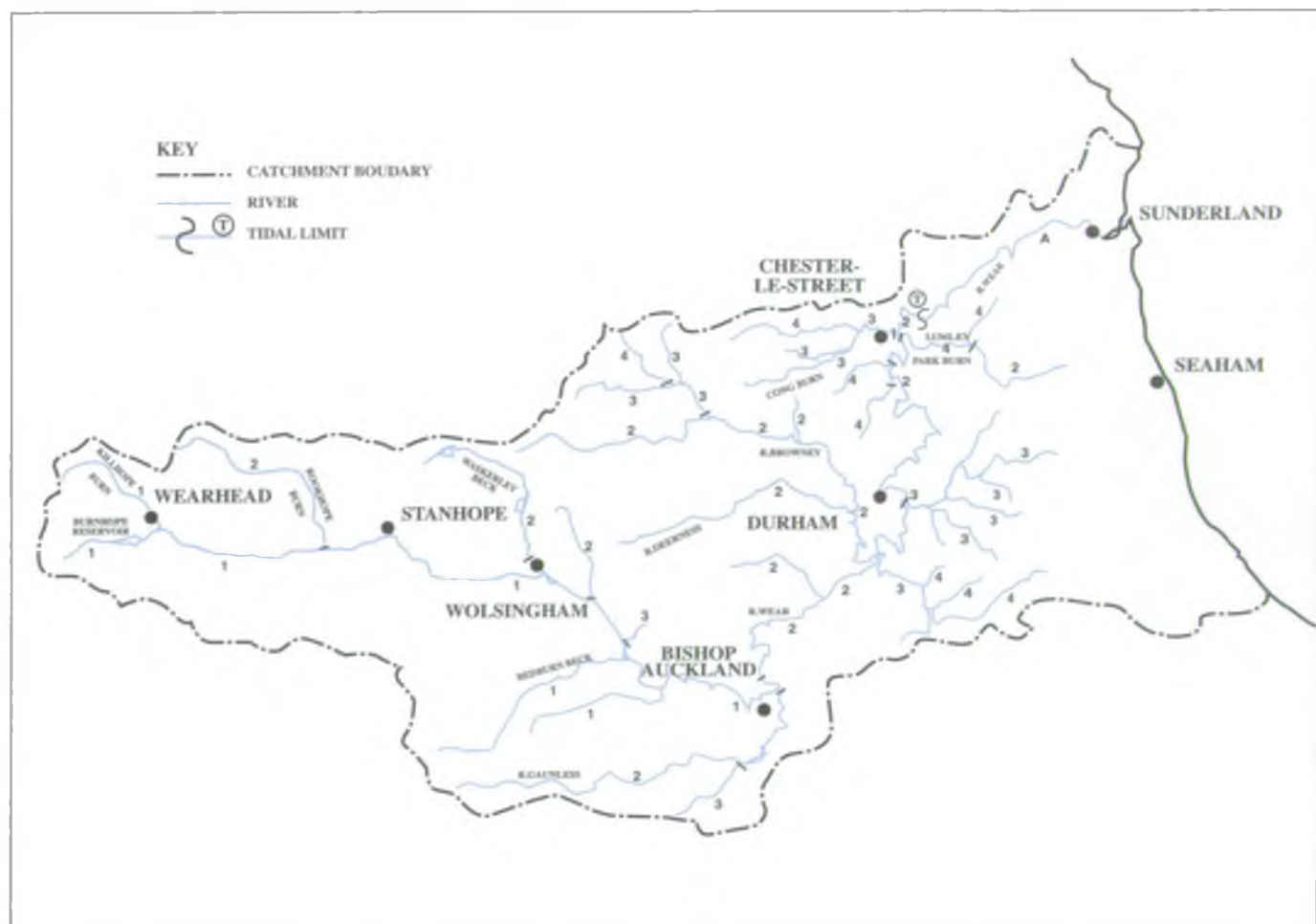
The Water Resources Act (1991) allows the Government to set Statutory Water Quality Objectives (SWQOs). The scheme is based upon the recognised uses to which a river stretch may be put. These uses include Rivers Ecosystem (RE), Special Ecosystem (SE), Potable Abstraction, Agricultural and Industrial Abstraction and Water Sports. To date regulations have only been agreed for just one of these, River Ecosystem. This comprises five quality classes reflecting criteria to be met by samples of the river water.

The five classes are described as:

Implementation of the regulations is still awaited from Government. In the interim the current RE targets are non-statutory. The introduction of SWQOs will require full public consultation and we will use the annual monitoring report and other approaches to keep you informed of progress.

The RE Water Quality Objectives for the River Wear are shown below (these are currently non-statutory):

- | | |
|-----|---|
| RE1 | Water of very good quality suitable for all fish species |
| RE2 | Water of good quality suitable for all fish species |
| RE3 | Water of fair quality suitable for high class coarse fish populations |
| RE4 | Water of fair quality suitable for coarse fish populations |
| | Water of poor quality which is likely to limit coarse fish populations. |
| RE5 | Water of poor quality which is likely to limit coarse fish populations. |



4.0 ACTIVITY PLAN

We have already presented the vision and some key aims and objectives for the River Wear catchment. The following Activity Plan identifies and describes future work in working towards that vision.

The vision is related to the issues in the following way:

- *the vision expresses our long-term (10 years or more) ambitions for the catchment.*
- *the Activity Plan cover the key issues which require tackling. Activity is focused by establishing:*
 - *aims*
 - *specific objectives to achieve the aims*
 - *specific actions to achieve these objectives. (There may be several actions to one objective).*

In addition to the Activity Plan tables we have prepared a **Land Use Statement**. The purpose of this is to identify how the planning and use of land for urban and rural activities can be made sustainable in relation to the water environment. It gives a catchment perspective to documents such as our "Guidance Notes for Local Planning Authorities on Methods for Protecting the Water Environment through Development Plans" and will assist local authority planners and those involved in countryside management and agricultural activities to take account of water issues in their decisions and actions.

The whole Action Plan will be 'live' and dynamic and the NRA expects that the Catchment Management Plan will continue to evolve as:

- environmental circumstances change
- pressures on the River Wear catchment change
- other organisations and individuals become involved
- opportunities for joint projects arise
- funding opportunities arise

We will undertake monitoring and reporting back on progress of the Action Plan in the Annual Monitoring Report. This will be particularly important as opportunities arise for the public, private and voluntary sectors to work together to deliver the actions, objectives and vision. In order to highlight our intentions, Action W51, on the future of communication and liaison between interested parties has been included.

The activity plan summarises:

- what will be done
- who will be doing it
- when it will be done
- how much it will cost

We have included in the following tables issues which currently have no actions identified with them in the five year period shown. We feel that it is important to keep these issues 'live' by including them in the Activity Plan. Changing circumstances and availability of resources may mean that actions, by the NRA or other organisations, may be developed as a result of their inclusion.

Discussions during the consultation period, both internally and with external bodies, have led to several of the issues presented in the Consultation Report being changed. In the table below the Issues have thus been re-ordered and numbered from those presented in the Consultation Report. The Consultation Issue number is presented in brackets to allow cross referencing between the two documents.

LAND USE STATEMENT

AIM ● To ensure that all new developments within the Wear catchment meet the needs of the present without comprising current and future uses of the water environment.

Sustainable development is at the heart of international and UK policy on the environment. Agenda 21, the international blueprint for sustainable development, identifies the need for an integrated approach to the management of land and water resources within catchment boundaries. The role of the NRA in supporting the principles of sustainable development is to ensure that decisions throughout society are taken with proper regard to the impact on the water environment.

The purpose of this Land Use Statement is to highlight issues that local planning authorities and others involved in the management of urban and rural areas need to consider and respond to if the critical natural capital of Wear catchment's water environment is to be managed in a sustainable way.

Government planning guidance (eg PPG12, PPG23, RPG7, Circular 30/92) highlights the importance of communication between local planning authorities and the NRA and the relationship between land use and water matters. It is just as important that contact is maintained with other agencies whose policies and actions impinge on the water environment.

We will use collaboration, partnership and consultation with others including relevant central government departments, local authorities, English Nature, English Heritage, Countryside Commission and the Sports Council to protect and enhance the water environment.

Of particular importance is integrating the efforts of public authorities and agencies - often across artificial administrative boundaries - to avoid duplication and to ensure that essential information and policy on the water environment is clear and concise.

We will seek to ensure that land and water use management policies are integrated and that information on the status of the water environment is made available in an appropriate form. We recognise the need to ensure policy on water issues is clear, consistent and concise.

River Wear Land Use Statement (RWLUS).

We will encourage all relevant land use policy and strategy documents to reflect the range of issues described in our January 1994 booklet "Guidance Notes for Local Planning Authorities on the Methods of Protecting the Water Environment through Development Plans". In particular we will stress the importance of land use issues, which reflect the characteristics of the River Wear catchment and the pressures being placed on it as identified in the various statutory development plans covering the catchment. There may be pressures for the allocation of land for development which bring job opportunities to the region to replace those lost in the mining industry. In addition, new open cast coal sites proposed. These issues will be discussed with local planning authorities and other organisations who can contribute to their implementation. The following NRA Northumbria and Yorkshire Region documents provide the background to this statement:-

- River Wear CMP Consultation Report (October 1994)
- "NRA Developers Guide - Northumbria Area"
- "NRA Planning Liaison Guide" (for Local Authorities).
- Regional Water Resource Strategy - Northumbria and Yorkshire.
- Policy and Practice for the Protection of Groundwater - Regional Appendix, Northumbria Region.

General. The NRA will encourage all authorities to adopt a precautionary approach to development which might affect the water environment (RWLUS1).

Sewerage. Full account needs to be taken of sewerage and sewage treatment issues in the location, timing and extent of any significant new development proposals. Areas within the River Wear catchment where the disposal of effluents may be particularly critical are the lower reaches of the River Gaunless and the higher and middle reaches of the River Browney. These areas already suffer water quality problems in some reaches and care must be taken to ensure that any future developments do not exacerbate them. Developments in rural areas where there are limited or no sewerage systems can also cause problems. Industrial or agricultural developments need to have adequate facilities for the storage of oils, fuels or chemicals and require a discharge consent if an effluent is to be discharged to controlled water (RWLUS2).

Groundwater Protection. Public water supplies are obtained from groundwater resources underlying the catchment. It is important for public health and the health of the environment that the quality of water in aquifers is given the strongest possible protection. Guidance, given in the NRA document 'Policy and Practice for the Protection of Groundwater' on the location and nature of development, will be strongly promoted to ensure protection of aquifer resources in general and individual major public supply sources and their associated groundwater areas in particular. The whole Eastern area of the catchment is on the Magnesian limestone which is as classified as a Major aquifer (RWLUS3).

Flooding. New development in floodplains and on low lying coastal areas is likely to be at risk from flooding. The NRA holds information identifying many of the areas known to be at risk and will provide such information as required. Development can also have the effect of increasing the risk of flooding elsewhere. New developments within the identified floodplain or in the areas at unacceptable risk from flooding, should therefore, be resisted. Where it is decided that development in such areas should be permitted for social or economic reasons, then appropriate flood protection and mitigation measures, including measures to restore floodplain or provide adequate storage, will be required to compensate for the impact of development. At sites suspected of being at unacceptable risk from flooding but for which adequate flood risk information is unavailable, developers will be required to carry out detailed technical investigations to evaluate the extent of the risk. In all cases, developers will be required to identify, implement and cover the costs of any necessary measures. In some cases the elements of the necessary measures may be such that they are undertaken by the NRA but in these cases the NRA would expect the cost would be covered by the potential developers. Within the River Wear catchment particular areas where care should be taken with regard to development are: Durham, parts of Bishop Auckland, Cong Burn and Beechburn Beck. Further areas at risk from flooding may be identified as a result of surveys currently being undertaken (RWLUS4).

Rural Land Use. The type, management, and changes of rural land use can influence water quality, water quantity and the physical environment within the catchment area. The Code of Good Agricultural Practice for the Protection of Water and the Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations 1991 and the 'Forests and Water Guidelines' summarise the best practices for agriculture and forestry in relation to the protection of the water environment. Continued application of these will minimise the risk to the water environment.

A great many potential enhancements to freshwaters and their associated river corridors are within landowners' and farmers' control. A number of grants currently exist to encourage farmers to manage land in environmentally sensitive ways. Both deciduous and native coniferous forestry schemes are grant aided by the Forestry Authority. MAFF, with the Woodland Grant Scheme, encourages the creation of new woodlands on farms. Also of considerable interest are the existing 'set aside' scheme and the Countryside Commission's Countryside Stewardship Scheme and, where appropriate, the Pennine Dales Environmentally Sensitive Area (ESA) which can provide grant payments to farmers to establish "buffer zones" alongside watercourses.

There is considerable scope for enhancements to river corridor habitats of the River Wear. The NRA will work with landowners, farmers and other agencies to maximise the benefits such habitat improvements can bring to the fisheries, nature conservation, landscape and recreational value of the catchment (RWLUS5).

Mineral Extraction. Mineral extraction and the restoration of sites can raise a number of environmental issues. The extraction process, if it involves dewatering of workings, can lower groundwater levels around the site, possibly affecting flows in watercourses. In addition, the restoration of worked-out sites may increase the risk of flooding if they are located within the flood plain. The landfilling of sites with wastes may increase the risk of pollution. However, the NRA recognises that worked-out sites may offer opportunities for environmental enhancement, the provision of water based recreation or flood protection. The NRA will work with the Mineral Planning Authority and developers to minimise the effects of mineral working and to maximise the benefits to the water environment from any restorations (RWLUS6).

Redevelopment of Sites. The NRA generally supports the re-use of 'brown field' sites where it can be demonstrated that the redevelopment will not result in adverse effects on the water environment. This can relieve development pressure on 'green field' sites (RWLUS7).

WATER QUANTITY

AIM • To protect and improve water quality to standards which will sustain the current and future uses of the River Wear and its tributaries, including fish populations.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
The Reduction of Deep Coal Mine Pumping.											
W1 (2.1)	To ensure that any changes to the pumping regime in the Durham coalfield do not lead to an unacceptable risk of pollution.	● The NRA will object to proposals by the Coal Authority to change the pumping regime unless satisfied that such changes will not lead to an unacceptable risk of pollution.	NRA	CA	-						
		● Continue the mine waters investigation projects to: - investigate likely flow routes for minewater through the coal field; - up-date predictions as data are collected from investigation boreholes and water level monitoring in pump shafts; - consider proposals from the Coal Authority to ensure any changes in pumping will not lead to unacceptable risk of pollution; - collect data concerning the current environmental/ecological quality of potentially affected waters; - identify and measure changes resulting in any future modification in pumping regime - disseminate information to interested parties.	NRA	CA	140 (95/6)						
		● Following the publication of the draft "Code of Practice", the NRA will continue dialogue with the Coal Authority and mine operators to work towards an operational framework regarding discharges from coal mines.	NRA	CA	<5						
		● The NRA will continue to work closely with Local Authorities and all other interested parties to minimise the pollution risk to the River Wear.	NRA	CA DCC LA	<5						

Note 1 Costs have been allowed for in NWL's capital expenditure plan programme 1995-2005; the exact timing and cost of works is currently being determined and more detailed information will be given in annual updates.

Note 2 The costs associated with these improvements have not been allowed for in the capital expenditure plan programme 1995-2005; of NWL and approved by OFWAT. However, the NRA will seek the co-operation of the company to pursue such additional Schemes offering best environmental benefits if funds become available.

Note 3 Denotes an NRA Area wide project, cost quoted is for whole project. Only a proportion of this cost is relevant to the Tyne catchment.

Note 4 Projects shown cover the Rivers Tyne and Wear.

* Denotes point added during public consultation.

U Unavailable Costs.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
W2	To determine the potential costs arising from any pollution of the River Wear in the event of uncontrolled minewater discharge and ensure these are widely available and understood. Estuary	<ul style="list-style-type: none"> Look for partners to establish a project to undertake a full economic appraisal of the River Wear to estimate the full financial consequences of allowing any pollution. 	NRA LA NEW SC LA CA	<5						
W3 (3.1)	To comply with the List II standard for Tributyltin (TBT) of the Dangerous Substance Directive in the lower estuary. (There are no longer ship repair companies using TBT on the Wear).	<ul style="list-style-type: none"> Continue to monitor TBT in water and bioaccumulation in biota and sediments. [Output - Report ?/9?] 	NRA	<5						
W4 (3.2)	To stop discharges of untreated sewage into River Wear at Queen Alexandra Bridge, Castletown Way, North and South Hylton. Main Wear/General	<ul style="list-style-type: none"> Intercept the discharges and divert them to Hendon STW [Output - Construction by 2001] Monitor to assess the extent of impact and benefit of changes to the outfalls. [Output - Report by 2000] 	NWL NRA	Note 1						
W5 (3.3)	To comply with the ammonia EQS of the Freshwater Fisheries Directive.	<ul style="list-style-type: none"> Upgrade STWs [Output - Construction by 2001] Monitor to assess the extent of impact and benefit from any alteration to consent. [Output - Report by 2001] 	NWL NRA	Note 1						
W6 (3.4)	To establish if the River Wear and some tributaries are 'sensitive waters' under The EC Urban Waste Water Directive.	<ul style="list-style-type: none"> Continue integrated biological and chemical assessment of possible 'sensitive waters'. [Output - Report 1996] 	NRA	<5						
W7 (3.5)	To reduce pollution risk in the Wear catchment	<ul style="list-style-type: none"> Complete farm pollution risk assessment within Wear catchment. [Output - Report by 1997] 	NRA	25						
W8 (3.6)	To minimise the effects of abandoned mines and spoil heaps on water quality.	<ul style="list-style-type: none"> Initiate a project to locate, assess the effect of and prioritise, significant abandoned mine. [Output - Report by 1997] Recommend methods of dealing and identify potential sources of funds for any cost beneficial work recommended. 	NRA LA NRA LA	25 Note 3 5 Note 3						
W9 (3.8)	River Gaunless To achieve the RE target of River Gaunless downstream of South Church	<ul style="list-style-type: none"> Improvements to the sewerage system to reduce impact of storm sewage discharges. [Output - Improvements by 2001] Monitor to assess the extent of impact and benefit from any improvements. [Output - Report by 2001] 	NWL NRA	Note 1 <5						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
	Croxdale Beck									
W10 (3.9)	To achieve the RE target of Croxdale Beck between A1(M) and East Howle Beck.	● Upgrade Cornforth STW.	NWL	Note 2						
	River Browney									
W11 (3.10)	To achieve The RE target of the River Browney at Malton and downstream of Browney STW	● Upgrade Lanchester STW and Browney STW.	NWL	Note 2						
	Smallhope Burn									
W12 (3.11)	To achieve the RE target of Smallhope Burn downstream	● Upgrade Knitsley STW.	NWL	Note 2						
	Stockerley Burn									
W13 (3.12)	To achieve the RE target of Stockerley Burn	● Upgrade Crookhall STW. ● Study the effects of toxic elements in discharge and apply appropriate consents. [Output - Recommendations by 1996]	NWL NRA	Note 2 10						
	Cong Burn									
W14 (3.13)	To achieve the RE target of Cong Burn downstream of its confluence with the Twizell Burn	● Upgrade Hustledown STW	NWL	Note 2						
	Twizell Burn									
W15 (3.14)	To improve the quality of Twizell Burn.	● Continue multiple discharges project to prioritise discharges by impact. [Output - Report by 7/95]	NRA	<5						
	Herrington Burn and Lumley Park Burn									
W16 (3.15)	To achieve the RE targets of Herrington Burn and Lumley Park Burn.	● Upgrade Sedgely STW [Output - Construction 2001] ● Monitor to assess the extent of impact and benefit from upgrading. [Output - Report by 2001] ● Liaise with Sunderland City Council to minimise metal discharges from the site during land reclamations. [Output - Meetings]	NWL NRA NRA SCC	Note 1 <5 <5						
	South Burn									
W17 (3.17)	To achieve the RE target of two stretches of the South Burn	● Upgrade Sacriston STW.	NWL	Note 2						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
	Tributary of Coalford Beck										
W18	To achieve the RE target (3.18) of stretch of the tributary	<ul style="list-style-type: none"> ● Upgrade Pittington STW 	NWL		Note 2						
	Coundon Burn										
W19	To improve the water (3.19) quality of Coundon Burn.	<ul style="list-style-type: none"> ● Improvements to prevent discharges of storm sewage throughout the catchment. [Output - Construction by 2001] ● Monitor to assess the extent of impact and benefit from any improvement work. [Output - Report by 2001] 	NWL		Note 1						
	Rookhope Burn										
W20	To minimise the effect of (3.20) high levels of zinc discharging from abandoned metalliferous mines and an existing fluorspar mine on Rookhope Burn.	<ul style="list-style-type: none"> ● Undertake chemical and biological assessment of discharges ● Continue project with the following objectives: <ul style="list-style-type: none"> a) To identify and cost possible treatment methods b) Identify joint partners to fund any recommended work. [Outputs - Recommendations by 1995] ● Review consent at working mine. 	NRA		<5						
	Beechburn Beck										
W21	To improve the water (3.21) quality of Beechburn Beck.	<ul style="list-style-type: none"> ● Improvements to combine sewer overflows throughout the catchment. [Output - Construction by 2001] ● Monitor to assess the extent of impact and benefit from any improvement work. [Output - Report by 2001] 	NWL		Note 1						
	Coastal Streams										
W22	To reduce the potential (3.22) risk to water quality of the magnesian limestone aquifer from emergency overflows and CSOs in Castle Eden Burn.	<ul style="list-style-type: none"> ● NWL continue their drainage area study to investigate CSO and emergency overflows in Castle Eden Dene. ● Improvements to the emergency overflows and CSOs. [Output - Construction by 2001] ● Assess impact biologically and chemically to identify problem discharges. [Output - Report by 1997] 	NWL		Note 1						
			NWL		Note 1						
			NRA		<5						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST (£K)	1995	1996	1997	1998	1999	FUTURE
Coastal Streams (contd)										
W23	To improve the water (3.23) quality of Seaton Burn.	<ul style="list-style-type: none"> Improvements to combine sewer overflows throughout the catchment. [Output - Construction by 2001] Biological and chemical assessment of catchment to identify problem discharges. [Output - Report by 1996] 	NWL NRA	Note 1 <5	—	—	—	—	—	—
W24	To improve the water (3.24) quality of Dalton Burn.	<ul style="list-style-type: none"> Improvements to combine sewer overflows throughout the catchment. [Output - Construction by 2001] Biological and chemical assessment of catchment to identify problem discharges. 	NWL NRA	Note 1 <5	—	—	—	—	—	—
Stillwaters										
W25	To increase awareness of (3.25) Blue-green algae blooms occurring in stillwaters and minimise the effects of them	<ul style="list-style-type: none"> Educate users about health risks of water contact recreation and other uses via a national leaflet. [Output - Leaflet by 1996] Initiate a project to identify and prioritise affected water bodies and, where appropriate develop management action plans in conjunction with other organisations. [Output - Leaflet and Management Action Plans] 	NRA NRA LA EHO RG Owners	<5 10	—	—	—	—	—	—

WATER QUANTITY

AIM ● To manage that water resources to achieve a balance between those of water users and the needs of the environment.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
W27 (4.1)	To develop and apply the river regulation policy to the River Wear to balance the needs of the river users and the ecology of the river.	<ul style="list-style-type: none"> Continue to investigate ecological effects of Kielder Transfers via collaborative project with Northumbria University [Output - Recommendations by 1997] 	NRA NU	U						
W28 (4.3)		<ul style="list-style-type: none"> Initiate a project with the following objectives: <ol style="list-style-type: none"> To determine ecological needs of the river in different reaches with respect to level, velocity and flow. To assess benefits and detriments of high and low flows. To evaluate benefits of seasonal variable MMFs or compensation flows [Output - Recommendations by 1998] Review compensation releases, including reservoirs where none now formally exist (Waskerley, Tunstall & Burnhope). 	NRA NWL NEW WIA	75 Note 4						
			NRA	25 Note 4						
W29 (4.4)	To identify rivers, stream or wetland sites where water quantity is critical to the ecological diversity of that habitat and ensure that suitable water levels are maintained if possible.	<ul style="list-style-type: none"> Undertake Water Level Management Plans (WLMP) for key sites. [Output - 2 WLMP by 1998] 	NRA EN LO	5						

FLOODING OF LAND AND PROPERTY

- AIMS**
- To provide an effective flood forecasting and floodwarning service
 - To provide effective defences for people and property against flooding from rivers and sea, where justified
 - To ensure that any flood defence works include all reasonable opportunities to conserve and enhance the rivers' natural ecology.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
W30 (5.1)	To identify land and property on 'Main River' which are not protected TO the provisional target standard of protection.	<ul style="list-style-type: none"> ● Review level of service in all areas with flooding or drainage problems associated with 'main river' and carry out asset condition surveys river' in the catchment. [Output - Report by 1995] ● Produce 10 year plan of prioritised schedule of capital works to be constantly updated [Output - Schedule by 1995] 	NRA LA	134 Note 3						
W31 (5.2)	To assist L.A in dealing with non-main river flooding	<ul style="list-style-type: none"> ● District Councils to be provided with rainfall data to help alleviate urban flooding. ● Review 'Main River' designations [Output - Recommendations by 1997] 	NRA LA	<5						
W32 (5.3)	To improve co-ordination of emergency services during flood events	<ul style="list-style-type: none"> ● Improve liaison procedures and ensure adequate frequency of contact and update of procedures. [Output - Procedures by 1996] 	NRA Police emergency services, LA	10 Note 3						
W33 (4.2)	To improve flood warning (At present there is no mechanism to predict snow melt in the upper catchment).	<ul style="list-style-type: none"> ● Develop forecasting procedures for the Wear catchment using monitoring equipment (snow pillow) at Cow Green, in Teesdale. [Output - Procedures Report 1997] 	NRA	<5						
W34 *	To ensure that flood defence works contribute to the achievement of conservation duties of NRA.	<ul style="list-style-type: none"> ● Ensure specifications for flood defence maintenance works include all reasonable opportunities to conserve and enhance the rivers natural ecology [Output - Work specifications by 1995] 	NRA	<5 Note 3						

PHYSICAL FEATURES, SPECIES AND HABITAT MANAGEMENT, RECREATION

- AIMS** ● To maintain and enhance the diversity of natural instream river features, river corridor habitats and their associated flora and fauna.
 ● To encourage the sustainable development of the River Wear for recreational use.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
Physical Features										
W35 (6.1)	To ensure, where appropriate, artificial barriers do not impede natural migration of fish, whilst maintaining their flood defence, landscape and recreational importance	<ul style="list-style-type: none"> Initiate a project with the following objectives: <ol style="list-style-type: none"> To undertake a review of the flood defence, fisheries, nature conservation, landscape and recreational importance of all significant mills, weirs and bridges. To identify their owners To agree policies on their futures and recommend work if needed. [Output - Report and Recommendations by 1998] 	NRA LA RG	30 Note 3 WIA Weir owners						
W36 (6.2)	To remove the potential risk of environmental damage from the use of licences for the removal of gravel from the river bed.	<ul style="list-style-type: none"> Undertake discussions with the Local Authorities regarding the review all such licences and new off-river licences only to be granted where an on-river licence is revoked. [Output - Meetings by 1997] 	NRA LA	<5						
Management of Habitats and Species										
W37 (7.1 7.2)	To enhance waterside habitats (important for supporting a wide range of insects, birds & mammals as well as providing cover and food source for fish).	<ul style="list-style-type: none"> The NRA, in conjunction with landowners, FWAG, NWT and EN seek to identify, agree and implement bank enhancement plans. [Output - Enhancements of key sites] The NRA will advise ACs and landowners on methods of enhancing river habitats [Output - Meetings] Produce Habitat Enhancement Booklet and circulate to all interested parties [Output - Booklet by 1996] 	NRA FWAG DWT WIA	50						
			NRA AC	10						
			NRA	<5						
W38 (7.3)	To develop and implement a conservation strategy for otters in the Wear catchment.	<ul style="list-style-type: none"> Initiate a project to assess the status of the otter population and recommend management options in conjunction with W37. 	DWT NRA	<5						
W39 *	To protect otters from the risk of being caught in fyke nets	<ul style="list-style-type: none"> Continue regional byelaw review in relation to otter guards for fyke nets [Output - New byelaws 1996] 	NRA Netsmen MAFF	<5						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY LEAD OTHER	COST(£K)	1995	1996	1997	1998	1999	FUTURE
Management of Habitats and Species (contd)										
W40 (7.4)	To protect and enhance the Atlantic Stream Crayfish population in the North East.	<ul style="list-style-type: none"> Initiate a project with the following objectives: <ul style="list-style-type: none"> a) To map the distribution of the species b) To increase public awareness of the threat to the species c) To recommend specific actions for the conservation of the species within the catchment. [Output - Recommendations by 1997] 	NRA EN	10						
W41 (7.5)	To minimise the effects of invasive weeds such as giant hogweed, Himalayan balsam and Japanese knotweed on natural habitats.	<ul style="list-style-type: none"> Initiate a pilot project with the following objective: <ul style="list-style-type: none"> a) To map the distribution of the species b) To increase public awareness c) To trial methods of control of invasive weeds [Output - Map, Leaflet, Recommendations by 1997] Consider costs and benefits of extending trial to other areas. [Output - Cost/ benefit Report by 1997] 	NRA LA	15 Note 3						
Fisheries										
W42 (8.1)	To inform intested parties of NRAs national policy towards inland fish-eating birds: the NRA will not support killing of cormorants or goosanders until serious damage has been established and killing proven to be the most effective management procedure.	<ul style="list-style-type: none"> Ensure NRA national policy and research is communicated to all interested parties. [Output - Leaflets 1996] 	NRA	<5						
W43 (8.2)	To maintain and improve the brown trout population.	<ul style="list-style-type: none"> Initiate a project with the following objectives: <ul style="list-style-type: none"> a) To review available data regarding brown trout population b) To carry out further survey work to assess the brown trout population c) To identify brown trout spawning areas d) To develop an area wide strategy for brown trout [Output - Strategy by 1997] 	NRA WIA AC	40 Note 3						
W44 (8.3)	To reduce loss of adult salmonids as a result of poaching.	<ul style="list-style-type: none"> Bailiff force to target problem areas. [Output - Prosecutions] 	NRA							

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
Recreation											
W45 (9.1)	To encourage the sustainable development of the Wear for recreational use	<ul style="list-style-type: none">Develop and implement the 'Making Waves' strategy project with the following objectives:<ul style="list-style-type: none">a) To initiate/set-up management bodies to ensure sustainable development of the estuary for recreational use as part of a regional strategy (providers and users forums have been set up).b) Co-ordinate recreational use of the estuary with spatial and time zones.c) To improve existing facilities and develop new launch ramps, pontoons and moorings at key locations,d) To educate users about bye-laws, use of access points and the importance of proper training. [Output - Improved recreational opportunities by 1997]Jointly fund Watersports Development Officer based at Marine Activity Centre to co-ordinate water recreation in Sunderland and the Wear estuary.	TWWPTWDC	NRA SC LA Users	U Note 4 (NRA 17)						
W46 (9.2)		<ul style="list-style-type: none">Continue project to improve the safety of the weir at Chester-le-Street.Undertake discussions with the Riverside Project, Chester-le-Street regarding NRA collaboration. [Output - Meetings]	NRA	BCU SC LA	10						
W47 (9.3)		<ul style="list-style-type: none">Negotiate a model canoe access agreement on the NRA owned fishery at Eastgate.	NRA	AC BCU LO	<5						
W48 *		<ul style="list-style-type: none">Seek to negotiate a canoe access agreement between the BCU and LO and then to promote good practice by canoeists by<ul style="list-style-type: none">a) a canoe access answerphoneb) producing detailed site specific canoe access guides eg. Eastgate [Output - Meetings and Guides]	NRA	BCU LO WIA AC	<5						

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
Recreation (contd)											
W49		● To act as an honest broker to resolve disputes between user groups and negotiate amicable agreements for future use of waterbodies where disputes have arisen. [Output - Meetings]	NRA		<5						
W50		● To support PHLS in producing a leaflet which will put into perspective potential risks and hazards users may expose themselves to in, on or near water, ie. to educate the public so they can do their own "risk assessment" before deciding whether to use a water body for recreation. [Output - Leaflet by 1996]	PHLS	NRA	U (NRA 9)						

COMMUNICATION

AIMS ● To develop the River Wear Catchment Management Plan in partnership with all interested parties.

No.	OBJECTIVE	ACTIONS	RESPONSIBILITY		COST(£K)	1995	1996	1997	1998	1999	FUTURE
			LEAD	OTHER							
W51	To ensure clear communication between all the interested parties. (During the consultation process many contacts have been established and it is up to all parties to ensure that constructive two way communication is maintained and that the Catchment Plan is an evolving and effective document).	<ul style="list-style-type: none">● The NRA will:<ul style="list-style-type: none">a) ensure that annual reviews of the plan are made available to all interested parties;b) discuss the formation of a 'user forum' to assist in monitoring and developing the CMP;c) encourage other parties to become actively involved in the development of the CMPd) seek to ensure that the concept of integrated catchment management planning is taken forward by all relevant organisations. [Output - Meetings and Annual Reviews]	NRA	all other parties	10						
W52		<ul style="list-style-type: none">● Create CD-ROM 'Dipper' project on the River Wear for use in schools and libraries throughout County Durham.	DCC	NRA NWL	<5						

ROUTINE WORK OF THE NRA

In addition to the activities highlighted in the action plans the NRA will continue to undertake routine activities to protect and improve the water environment. These activities include:

Operations to

- *maintain flood defences and watercourse structures and manage NRA owned sites.*
- *prevent pollution incidents*

Monitoring to

- *evaluate the quality and quantity of surface and ground waters, evaluate the flora and fauna of the water environment.*

Authorisations to

- *control physical works on rivers and their floodplains and to enhance the environment.*
- *regulate fisheries activities*
- *control discharges of effluent*
- *control abstractions of water*
- *control the use of aquatic herbicides and asulam*

Enforcement to

- *ensure compliance with authorisations and legislation.*

Emergency Response to

- *flooding incidents, pollution incidents and fish kills.*

Liaison to

- *ensure planning decisions do not lead to damage to the water environment*

5.0 IMPLEMENTING THE PLAN

The NRA is jointly responsible with other identified organisations, groups and interests for implementing this Final Plan for the River Wear catchment. Progress will be monitored and reported annually by the NRA to all key partners.

The Annual Monitoring Report will:

- *examine the need to update the Catchment Management Plan in the light of changes in the catchment*
- *compare work achieved with that shown in the Activity Plan and describe the reasons for changes to the content or timing of individual actions*
- *roll forward the detailed Activity Plan*
- *report on the environmental status of the water environment.*



GLOSSARY

AC	Angling Clubs
Agenda 21	A comprehensive programme of action needed throughout the world to achieve a more sustainable pattern of development for the next century. UK Government adopted the declaration at the UN Conference on Environment and Development (the Earth Summit) held in Rio de Janeiro in 1992.
BCU	British Canoe Union
CA	Coal Authority
CC	Countryside Commission
DCC	Durham County Council
DWT	Durham Wildlife Trust
EHO	Environmental Health Officers
EN	English Nature
FA	Forestry Authority.
FEnt	Forest Enterprise.
FWAG	Farming and Wildlife Advisory Group
LA	Local Authorities
LO	Landowners
MAF	Minimum Acceptable Flow
MAFF	Ministry of Agriculture, Fisheries and Food
MOD	Ministry of Defence
NEW	North East Water plc
NRA	National Rivers Authority
NWL	Northumbria Water Ltd
NWT	Northumberland Wildlife Trust
PHLS	Public Health Laboratory Service
RG	Recreation Groups
SC	Sports Council
SCC	Sunderland City Council
STW	Sewage Treatment Works.
TWDC	Tyne and Wear Development Corporation
TWWP	Tyne and Wear Watersports Project
WEAR	Wearside Environmental Action and Resource
WIA	River Wear Fisheries Improvement Association

6.0 CONTACTING THE NRA

The national head office of the NRA is in Bristol

Tel: 0117 - 9624400

The Northumbria & Yorkshire Region head office is in Leeds

Tel: 0113 - 2440191

*Enquiries about the River Wear Catchment Management Plan
should be directed to:*

Before June 1995:

River Wear Catchment Management Plan

National Rivers Authority

Eldon House, Regent Centre, Gosforth, Newcastle upon Tyne

NE3 3UD (Tel: 0191 - 2130266)

After June 1995:

River Wear Catchment Management Plan

National Rivers Authority

Tyneside House, Newcastle upon Tyne

Tel: 0191 203 4000 Fax 0191 203 4004

NRA EMERGENCY HOTLINE

0800 80 70 60

24 hour free emergency telephone line

Help the
NATIONAL RIVERS AUTHORITY
to protect the
water environment





ENVIRONMENT AGENCY

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NORTH EAST REGION

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